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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/401,080    09/22/99    SHIKAMA

T    36856.00218

EXAMINER

MM91/0228

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INSTRUMENT  
ART UNIT

PAPER NUMBER

2832  
DATE MAILED:

02/28/01

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.  
**09/401,080**

Applicant(s)  
**Shikama et al.**

Examiner  
**Tuyen T. Nguyen**

Group Art Unit  
**2832**



☒ Responsive to communication(s) filed on Dec 11, 2000

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claims

☒ Claim(s) 1-13, 17, 18, and 20 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 1-13, 17, 18, and 20 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been

☒ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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## DETAILED ACTION

### *Priority*

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 3-8, 12-13, 17 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 8-306570 in view of JP 63-79306.

JP 8-306570 discloses a composite inductor [see figure 5] comprising:

- a rectangular parallelepiped shaped block [1];
- at least four spirally wound coils [2] arranged parallel relative to each other buried within a composite material forming the block, said coils having axes extending in the same direction; and
- substantially U-shaped external electrodes mounted on the block for connection to the ends of the four coils.

JP 8-306570 discloses the instant claimed invention except for the composite material being at least either resin or rubber having a magnetic material dispersed therein.

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JP 63-79306 discloses an inductor having a coil [1] buried in a block [2] formed of resin material having magnetic material dispersed therein.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the block material of JP 63-79306 for the composite material of JP 8-306570 for the purpose enhancing inductance of the device.

The specific material used for the external electrodes would have been an obvious matter of design choice based on cost considerations and necessary electrical conductivity.

4. Claims 2, 9-11 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 8-306570 in view of JP 63-79306 as applied to claims 1,3-8, 12-13, 17 and 20 above, and further in view of Maruyama [US 6,121,866].

JP 8-306570 in view of JP 63-79306 discloses the instant claimed invention except for each of the four coils having different electrical characteristics and the specific fashion in which the characteristics are achieved.

Maruyama discloses a plurality of coils [10], each having different electrical characteristics [see column 6, lines 12-16].

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the coil design of Maruyama in the inductor of JP 8-306570, as modified, for the purpose of controlling the noise and current capacity of the inductor.

Official notice taken to the effect that it is well known that the coil inductance can be vary by the number of turns, the thickness and the diameter of the wire for the winding.

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***Response to Arguments***

5. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Tuyen T. Nguyen whose telephone number is (703) 308-0821.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Michael Gellner, can be reached at (703)308-1721. The fax number for this Group is (703)305-7724.

Any inquiry of a general nature or relating to the status of this application of proceeding should be directed to the Group receptionist whose telephone number is (703)308-0956.

TTN TTN

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February 22, 2001

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TUYEN T. NGUYEN  
PATENT EXAMINER  
FEB 22 2001